

REMARKS

Claims 2-17 are pending. By this Amendment, Claim 1 is canceled; Claims 2, 4, 7-8 and 10-12 amended; and Claims 13-17 added. Applicants respectfully submit no new material is presented herein.

Allowable Subject Matter

Applicants respectfully acknowledge and appreciate the indication by the Examiner that Claims 2-7 and 10 would be allowable if rewritten to overcome a rejection under 35 U.S.C. §112, second paragraph and include all of the features of the base claim and any intervening claims. Applicants respectfully submit Claims 2, 4, 7 and 10 have been rewritten to overcome the rejection and include all of the features of the rejected base claim, i.e., Claim 1.

As such, Applicants respectfully submit Claims 2, 4, 7 and 10 are in condition for allowance.

Furthermore, Applicants note Claim 3 depends from Claim 2. Claims 5-6 depend from Claim 4. Claim 14 depends from Claim 7. Claim 16 depends from Claim 10.

As such, Applicants respectfully submit Claims 3, 5-6, 14 and 16 should also be deemed allowable for the at least the same reasons Claims 2, 4, 7 and 10 are allowable, as well as for the additional subject matter recited therein.

Claim Rejections – 35 U.S.C. §112, Second Paragraph

Claims 1-12 are rejected under 35 U.S.C. §112, second paragraph. Applicants respectfully submit the claims have been amended responsive to the rejection. As such, Applicants respectfully request the rejection be withdrawn.

Claims 8-9 and 11-12 also Recites Patentable Subject Matter

A. Claims 1 and 8-9 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Number 6,454,364 to Niwa et al. (hereinafter "Niwa"). Applicants respectfully traverse the rejection.

With regards to Claim 1, Applicants respectfully submit that since Claim 1 has been canceled herein without prejudice or disclaimer, the rejection with regards to Claim 1 is rendered moot and should be withdrawn.

Regarding the rejection of Claims 8-9, Applicants respectfully note that Claim 8 recites a hybrid vehicle including, among other features, during operation of a mechanical brake, a braking force for second driven wheels determined depending on an ideal distribution ratio is generated by a second motor/generator and the mechanical brake, and ***a deficiency of the regenerative braking force for a second motor/generator limited by the remaining capacity of the accumulating means is made up by a braking force of the mechanical brake.***

The Office Action asserts Niwa discloses a mechanical brake (44) wherein a deficiency of a regenerative braking force for the second motor/generator (42) that is limited by the remaining capacity of an accumulating means (not shown but deemed inherent by the Office Action) is made up by a braking force of the mechanical brake (44).

Applicants have reviewed Niwa and are unable to locate any teaching or suggestion that the braking force of the mechanical brake (44) is used to make up the deficient amount of regenerative braking force for the second motor/generator (42).

Applicants note Column 4, lines 4-18 is the only apparent portion of Niwa in which the mechanical brake (44) is discussed. The cited portion states:

A hydraulic circuit 46 of a friction braking device 44 is operable to control braking pressures applied to wheel cylinders 48FL, 48FR, 48RL and 48RR corresponding to the left and right front wheels 26FL, 26FR and left and right rear wheels 34RL, 34RR so as to control friction braking forces of the respective wheels 26FL, 26FR, 34RL, 34RR. Although not shown in the drawings, the hydraulic circuit 46 includes a reservoir, an oil pump, and various valve devices. The friction braking device 44 including the hydraulic circuit 46 is controlled by a braking control unit 52. During normal operations, the braking pressures applied to the respective wheel cylinders are controlled by the braking control unit 52, depending upon the pressure of a master cylinder 50 that is driven in accordance with the amount or degree of depression of the brake pedal 32 by the driver.

Applicants respectfully submit that as is clear from the above reproduced portion of Niwa, which is also the only apparent portion of Niwa in which operation of the mechanical brake (44) is discussed, Niwa fails to disclose or suggest any deficiency of the regenerative braking force for the second motor/generator (42) that is limited by the remaining capacity of an accumulating means (now shown) is made up by a braking force of the mechanical brake (44).

To qualify as prior art under 35 U.S.C. §102, a single reference must teach or suggest each and every feature of a rejected claim. As noted above, Niwa does not teach or suggest using the braking force of the mechanical brake (44) to make up for any deficiency of the regenerative braking force for the second motor/generator (42) that is limited by the remaining capacity of an accumulating means (now shown). As such, Applicants respectfully submit that Claim 8 is not anticipated by nor rendered obvious by the teachings of Niwa and should be deemed allowable.

Claims 9 and 15 depend from Claim 8. It is respectfully submitted that these dependent claims be deemed allowable for at least the same reason Claim 8 is allowable, as well as for the additional subject matter recited therein.

Therefore, Applicants respectfully request withdrawal of the rejection.

B. Claim 11 is rejected under 35 U.S.C. §103(a) as being unpatentable over Niwa in view of U.S. Patent Number 6,588,860 to Kosik et al. (hereinafter "Kosik"). Applicants respectfully traverse the rejection.

Claim 11 recites a hybrid vehicle including, among other features, the distribution ratio of the regenerative braking force to the second motor/generator is increased according with a decrease in a road surface friction coefficient.

Niwa is discussed above. Further, Applicants note the Office Action admits Niwa fails to disclose or suggest a distribution ratio of a regenerative braking force to a second motor/generator is increased according with a decrease in a road surface friction coefficient.

To address or otherwise overcome the deficiency in Niwa, the Office Action notes Kosik discloses the amount of regenerative braking is adjusted according to temperature which inherently deduces that the road conditions could have snow and ice when ambient temperature is below the freezing point.

Applicants respectfully, but forcefully, submit that while Kosik indeed discloses controlling the applying of regenerative braking that is applied to wheels (i.e., not the second motor/generator) of a vehicle based on ambient temperature, Kosik fails to teach or suggest increasing the amount of the distribution ratio of the regenerative

braking force applied to the second motor/generator according to a decrease in the road surface friction coefficient.

Applicants respectfully submit the Office Action appears to confuse the road surface with the road condition. It is well known to those in the industry that several factors contribute to vehicle traction and the likelihood that a vehicle can go into a skid: road surface, vehicle velocity, road conditions, weather, lighting, tire wear, tire inflation, temperature, the type of vehicle, suspension system, and vehicle load just to name a few. Road surface relates to the surface of a road, that is, is the road asphalt or concrete, rough or smooth, etc. The coarser a road surface, the more friction that is presented to help the vehicle grip the road surface. Road conditions, which are affected by, among other factors, ambient temperature, are not the same thing as road surface. For instance, with a rough road surface that is covered with ice, the tires may actually never "see" the roughness beneath. Different road conditions present varying friction opportunities to the tires. For example, a coarse roadway in the rain will hold less firmly than the same road when totally dry; likewise, snow-covered pavement will present fewer friction possibilities to the tires.

However, it is not necessarily so that changes in ambient temperature directly affect the road surface friction coefficient. For example, the Office Action deduces that when the ambient temperature is below the freezing point, road conditions could have snow and ice. However, Applicants respectfully note that similarly, the ambient temperature could be below the freezing point and yet there is no snow or ice on the road surface depending on factors such as humidity, barometric pressure, wind, and

other such factors. As such, the road surface friction coefficient may actually increase with an ambient temperature below the freezing point.

Applicants respectfully submit that to make a proper inherency rejection, the argument made in support of the rejection must show the fact that a particular characteristic is a necessary feature or result. See *Abbott Labs v. Geneva Pharms., Inc.*, 182 F.3d 1315, 1319, 51 USPQ2d 1307, 1310 (Fed. Cir. 1999). Also, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish inherency of that result or characteristic. See *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). Rather, to establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. See *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 195051 (Fed. Cir. 1999).

In view of the above possibilities regarding ambient temperature, the differences between road surface and road conditions and how different factors could lead to different facts and characteristics, Applicants respectfully submit that Kosik cannot stand for the proposition that measuring ambient temperature necessarily and factually results in a decreased road surface friction coefficient as is apparently being asserted by the Office Action. Put simply, Applicants respectfully submit the Office Action has not established *prima facie* obviousness of Claim 11 in view of the teachings of Niwa and Kosik, as the Office Action has failed to present a proper inherency rejection since

Kosik does not stand for the proposition that a decrease in ambient temperature necessarily and factually results in a decrease in road surface friction coefficient.

Therefore, in view of the above, Applicants respectfully submit Claim 11 is not rendered obvious by Niwa and Kosik, either alone or in combination, since neither of the references, combined or alone, teach or suggest each and every feature recited by Claim 11 as is required (M.P.E.P. §2143.03).

Claim 17 depends from Claim 11. It is respectfully submitted that this dependent claim be deemed allowable for at least the same reason Claim 11 is allowable, as well as for the additional subject matter recited therein.

Accordingly, Applicants respectfully request withdrawal of the rejection.

C. Claim 12 is rejected under 35 U.S.C. §103(a) as being unpatentable over Niwa in view of U.S. Patent Number 6,724,165 to Hughes. Applicants respectfully traverse the rejection, however, as Claim 12 has been amended herein to depend from an allowable base claim, Applicants respectfully submit the rejection is rendered moot and Claim 12 is in condition for allowance.

Applicants respectfully request withdrawal of the rejection.

Conclusion

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding rejections, allowance of Claims 2-17, and the prompt issuance of a Notice of Allowability are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing docket number 107348-00383.**

Respectfully submitted,
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Enclosure: Amendment and Fee Transmittal